

up a list of furnished apartments, which can be had on application. It is important, however, that all persons proposing to attend the meeting should give a long notice of their intention, in order to facilitate the arrangements which the Committee wish to make for their comfort.

RAMSDEN BACCHUS.

NOTES.

A CONFERENCE of delegates for the International Catalogue of Scientific Papers was held at the Royal Society on Tuesday and Wednesday.

THE second of the two soirées held annually at the Royal Society will take place on Wednesday next, June 20. This is the soirée to which ladies as well as gentlemen are invited.

MR. C. E. BORCHGREVINK will give an account of his Antarctic work at the meeting of the Royal Geographical Society on Monday, June 25, instead of June 18, as previously announced.

THE annual visitation of the Royal Observatory, Greenwich, will take place on Tuesday, June 26. The visitation has previously been held on the first Saturday in June, and the change of the customary date is due to the absence of the Astronomer Royal, and other astronomers, for the purpose of observing the solar eclipse. This does not, however, explain the change of day.

ON the occasion of the retirement of Sir Frederick Bramwell from the office of honorary secretary of the Royal Institution, the managers of the Institution unanimously resolved "to place on permanent record an expression of their high appreciation of the admirable way in which he has performed the duties of that office and of his signal services to the Institution generally."

THE death is announced of Dr. Julius Althaus, the distinguished physician and neurologist. He was the author of works on "Diseases of the Nervous System," "Failure of Brain Power," "Diseases of the Spinal Cord," "Medical Electricity," "Influenza" and "The Spas of Europe," and was an authority upon the use of electricity in medical practice.

THE next lecture of the Zoological Society of London will be delivered at the Society's Meeting Room, on Thursday, June 21, at 4.30 p.m., by Prof. E. Ray Lankester, F.R.S. The subject will be the gigantic sloths of Patagonia.

AT the last meeting of the Royal Society of Edinburgh, the following were elected as British Honorary Fellows:—Dr. Edward Caird, Master of Balliol College, Oxford; Dr. David Ferrier, professor of neuro-pathology, King's College, London; Dr. G. F. Fitzgerald, professor of natural and experimental philosophy, Trinity College, Dublin; Dr. Andrew Russell Forsyth, Sadlerian professor of pure mathematics in the University of Cambridge; Dr. Archibald Liversidge, professor of chemistry in the University of Sydney; Dr. T. E. Thorpe, principal of the Government Laboratories, London; and, as Foreign Honorary Fellows:—Dr. Arthur Auwers, secretary, Royal Prussian Academy of Sciences; Prof. Wilhelm His, Leipzig; and Prof. Adolf Ritter von Baeyer, Munich.

THE celebration of the centenary of the Royal College of Surgeons of England will commence on July 25 with a conversazione at the College. On Thursday, July 26, a centenary meeting will be held at the University of London, when an address will be delivered by the president, Sir William Mac-Cormac, and honorary fellowships will be conferred. On Friday, July 27, there will be a conversazione at the Mansion

House. The Committee have issued invitations to foreign and colonial surgeons, and propose to issue invitations to certain persons of distinction residing in Great Britain and Ireland. A short history of the College, with eight illustrations, has been prepared, and will be presented to guests invited to the centenary celebrations.

THE new clinical laboratories of Westminster Hospital were opened by Lord Lister on Tuesday, in the presence of a distinguished company. The laboratories have been added to the hospital to provide for a more scientific and systematic examination of disease than can be carried out satisfactorily in the wards. A few particulars concerning the work of the hospital were given by Sir J. Wolfe-Barry, K.C.B., and are reported in the *Times*. Westminster Hospital was, he said, one of the oldest hospitals in London, having been founded in 1719. 30,000*l.* had been spent in bringing the hospital up to modern requirements, and in 1899 it was decided to add clinical laboratories and improve the isolation wards and nursing accommodation. In time they hoped to institute an electrical laboratory fitted with the apparatus for the Röntgen rays and micro-photography. To meet these expenses 10,000*l.* was wanted.—Dr. Lazarus-Barlow, in giving a detailed account of the laboratories, said the hospital tried to keep in front of all research and modern improvements, scientific and clinical. The laboratories contained all the most recent apparatus for the clinical work of the hospital.—Lord Lister said it was no less a pleasure than an honour to him to take part in that day's ceremony. The beautiful clinical laboratories they had inspected would give the physicians of the hospital an opportunity of bringing to bear on their cases the most advanced knowledge and the most refined methods of investigation. Many a diagnosis which would otherwise be obscure would be rendered clear in those rooms. He need hardly say that the correct diagnosis was directly proportioned to successful treatment. In respect of what Sir J. Wolfe-Barry had said, he himself felt convinced that those who had worked in the laboratories would not only benefit patients in the hospital, but would also, unfailingly, be able to extend the boundaries of knowledge and promote the now rapid advance of pathological and therapeutic knowledge. The laboratories would also be of service as a powerful means of affording sound practical knowledge to the student.

DURING the early part of the present week a wave of unusual heat has passed over parts of England, accompanied by brilliant sunshine. In the neighbourhood of London, the shade thermometer rose to 89 on Monday, the 11th inst., and thunderstorms occurred over several parts with heavy rainfall, amounting to an inch in the Midland Counties. So high a temperature has not occurred at so early a period of the summer in the neighbourhood of London for more than fifty years. A sharp thunderstorm also visited London about 10 a.m. on Tuesday, and another occurred in the evening; there was also a renewal of severe thunderstorms over a large part of England. The temperature on Wednesday was considerably lower than on the preceding days.

FROM St. Petersburg to Vladivostok by way of the Arctic Ocean is (says the *National Geographic Magazine*) the plan of itinerary of an exploring party that early in June leaves the former city on the steamer *Aurora*. Six men of science and twelve sailors, all experienced in Arctic travel and led by Baron Toll, make up the party. Their special object is the careful exploration of the Arctic regions north of Siberia. After a brief stop at Tromsø, Norway, and at the new Russian port of Catherine Harbour, on the Lapland coast, they will proceed to the Taimur Peninsula, west of the Yenisei River, and there establish their winter headquarters. The neighbouring territory

is to be explored during the winter of 1900-1901. On the breaking up of the ice, about August 1901, it is proposed to push on to Sannikoff Land, discovered by Baron Toll in 1886 and as yet unexplored, and later farther northward to Bennett and De Long Islands, following the routes of the *Jeanette* in 1881 and of the *Fram*. The winter of 1901-1902 will be devoted to determining whether this group of islands extends to the Pole. When the water route reopens in 1902 they will resume their voyage to Bering Strait and reach Vladivostok in the autumn of the same year.

THE application of science to the great problem of mechanical traction is revealing the fact that at no distant date the motor car, or automobile, will be regarded a decided success in every respect. Electricity, steam and oil are still fighting for the paramount position of best agent for propulsion, and, on this account, trials and experiments always prove of interest. The *Engineer* (May 25) describes a series of trials for touring vehicles at the Paris Exhibition, and out of thirty-seven cars competing we find that three were driven by steam, and all the remainder propelled by petroleum motors. Among the more recent improvements on the heavier classes are smaller driving wheels; the motor still develops about six horse-power for cars carrying four or six passengers, their lower centre of gravity, owing to their smaller wheels, also proving an advantage when rounding corners at high speed. After exhaustive trials embracing distance, manipulation, grades, &c., medals were awarded to the makers of the following vehicles: the "Peugot" car, the "Delahaye" car, the "De Dietrich" car, and the "Panhard et Levasser" wagonette. All these are driven by petrol motors; for this kind of work, therefore, petrol stands in good stead, and it will be of interest to see whether this agent or steam is adopted for freight vehicles of a much heavier description.

THOUGH the articles upon scientific subjects in popular magazines can often only be called scientific by courtesy, yet we like to think that their presence in increasing numbers indicates a growth of public interest in the progress of science. *Pearson's Magazine* usually contains contributions which are instructive as well as interesting; and the reader who is no longer thrilled by episodes in the lives of freebooters, mysterious knights and similar personages over whom the glamour of the past may be thrown, must find relief by turning to the articles in which imagination is tempered with truth. In the June number of the magazine, we find an account of the destruction of the jack rabbit of the United States, by driving them into a corral, as described and illustrated in *NATURE* several years ago. M. Flammarion's experiments on the growth of plants under different coloured glasses, also described in these columns, form the subject of another interesting article. Mr. George Griffith concludes his story of imaginary visits to other worlds by means of a machine moved by a force with peculiar properties. If we may venture a criticism of this series of contributions, it is that Mr. Griffith's ideas are too anthropomorphic, and too limited by the present state of knowledge of the objects visited by his interplanetary travellers. Some of the work of the U.S. Fish Commission in pisciculture forms the subject of a short illustrated article; and an interview with Prof. Milne, illustrated by several seismograms, contains much interesting popular information upon earthquake waves. Finally, a number of reproductions of photographs of faces of athletes at the moment of victory are reproduced. The photographs are interesting to students of facial expressions, and a curious point revealed by them is that only in one case of the hundreds of photographs from which the selection was made is a pleasant expression upon the face of the winner.

A NOVEL way of making building land is being carried out not far from New York. The rapidly growing population of this city has made ground scarce on which to build villas and houses for the summer resort of the inhabitants; but the enterprise of the American builder is equal to the emergency, and land is now being literally pumped up from the sea, on which it is intended to erect houses, and to create a new suburb. The site chosen for this venture is the Nassau Beach, on the shore of Jamaica Bay, in Long Island, not far from Brooklyn. The salt marshes bordering on this coast, which for centuries have been overflowed by the tides, and which, of course, while in this condition were utterly unfit for building purposes, are being raised from four to six feet above high water by pumping up the sand, shells and gravel which form the floor of the bay, and delivering this on to the land to be reclaimed. The process adopted to attain this end is as follows:—A powerful suction dredger raises the material from the bed of the bay at the rate of 18,000 cubic yards a day, and with this five times the volume of water, which is sufficient to carry the sand and gravel along the twelve-inch pipes which deliver it on the low land. The water flows off by ditches along a more or less circuitous route back to the bay, the dredged material settling and quickly drying, and forming solid land. The thickness of the material when first deposited averages about eight feet, but there is shrinkage as it dries and consolidates. Ten acres have thus been raised since the pumping began a few months ago. A raised road and promenade two miles long and seventy feet wide, and an electric railway, will connect this new suburb with the railway to Brooklyn and New York.

WE have received the first numbers of the *Boletim Mensal* of the Rio de Janeiro Observatory. The work contains much useful information, chiefly contributed by Sr. L. Cruls, the able director of the Observatory, and it will form a welcome addition to current meteorological literature. As long ago as 1887, Sr. Cruls issued a large number of circulars to all meteorological organisations with the object of collecting data for a climatological dictionary. For want of adequate resources, this valuable compilation has not been published; but we are glad to see that he intends to utilise the bulletin for the publication of some of the principal results. The number for February contains the annual means and extremes for twenty-nine stations in Japan. Another paper worthy of special note is that by Sr. Pereira da Costa on the earliest observations made in Brazil.

READERS of Mr. Fitzpatrick's "Transvaal from Within" will recollect his reference in an appendix to a discussion which took place in President Krüger's Volksraad on the wickedness of firing guns in order to bring down rain. We learn from the *Corriere della Sera* that the practice of firing cannon as a preventive of hail has been adopted lately in Italy with successful results. On May 25, at about 17 o'clock or 5 p.m., three successive storms collected in the neighbourhood of Rogeno (Como), the clouds of which were evidently charged with hail. At a given signal fourteen cannon opened fire on the clouds, with the result that nothing fell except a little sleet, here and there. On the same day a vast amount of damage was done in the vicinity of Alessandria by hailstorms passing over the districts of Rocchetta, Tanaro, Masio, Felizzano and Quattordio about 16 o'clock (4 p.m.), the hailstones in some places massing to a depth of 50 cm. In the districts where cannon were adopted for dispersing the hail, the results exceeded all expectations; while in many parts of the district where this precaution was not taken the vineyards were completely destroyed.

ACTUARIAL experience is of distinct value in connection with the application of the statistical method to biological problems; therefore it is of interest to learn from the annual report of the Institute of Actuaries that the mortality investigation, which is

being conducted jointly by the Institute and the Faculty of Actuaries, has made material progress under the honorary supervision of Mr. T. G. Ackland. The volume containing the unadjusted data of the annuity experience has already been published. It has been decided to include in one volume the unadjusted data relating to endowment assurances and minor classes of assurance (male and female); and the council report that this volume, forming a second of these series, is now completed, and on the eve of publication. The extensive tables comprising the unadjusted data for whole-life assurances (male lives), are in the printer's hands, and will, when ready, form a third volume of the series. These will be followed, so far as the unadjusted data are concerned, by a fourth and final volume, which will contain the experience of whole-life assurances (female lives). The tables to be included in this final volume are finished, and are in course of being copied for the printer.

WE learn from *Science* that the University of Illinois has fallen heir to the Bolter Collection of Insects. The collection numbers approximately fifteen thousand species, represented by about seventy thousand specimens, besides thirty thousand duplicates not in the systematic collection. This collection, accumulated during the last fifty years by the late Andreas Bolter, is remarkable for the excellence of the material and for the exquisite care with which it has been prepared and arranged. It represents all orders of insects and North America in general, and contains also a considerable amount of exotic material. The gift was made by the executors of Mr. Bolter, in accordance with the terms of his will, conditional upon its maintenance as a unit, under the name of the "Bolter Collection of Insects," in a fire-proof building.

IN the *Irish Naturalist* for June, Prof. R. J. Anderson endeavours to account for the circumstance that in certain breeds of domesticated fowls the keel of the breastbone is crooked. It is somewhat curious to find that these crooked keels occur only in pure bred birds, the ordinary barndoor fowls having the keel straight. After consulting with a number of poultry breeders, the author comes to the conclusion that in-and-in breeding, the nature of the perches, the season, early hatching, defective food and cold may all contribute to the production of the abnormal condition.

IN the *Christiania Nyt Magazin for Naturvidenskaberne*, vol. xxxviii. Pt. I, Dr. G. Guldberg publishes some observations on the body-temperature of the Cetacea, in which he shows how extremely imperfect is our knowledge of this subject. As he remarks, it is a matter of extreme difficulty to obtain the temperature of living Cetaceans, although this has been taken in the case of a white whale and a dolphin, which some years ago were kept in confinement in a pond in the United States. With the larger whales such a mode of procedure is, however, obviously quite impracticable, and we have accordingly to rely on *post-mortem* observations. The layer of blubber by which all Cetaceans are protected from cold renders the *post-mortem* refrigeration of the blood a much slower process than in most mammals, so that such observations have a much higher value than might at first be supposed to be the case. Indeed, the blood-temperature of a specimen of Sibbald's rorqual three days after death still stood at 34° C. The various observations that have been taken have afforded the following results in *individual cases*:—Sperm-whale, 40° C.; Greenland right whale, 38·8° C.; porpoise, 35·6° C., liver of a second individual, 37·8° C.; common rorqual, 35·4° C.; dolphin, 35·6° C. The average blood-temperature of man is 37° C., and that of other mammals 39° C.; while that of birds is 42° C. The record of 40° C. in the case of the sperm-whale seems to indicate that at least some Cetaceans have a relatively high temperature.

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PROF. F. E. NIPHER, in a communication to the Academy of Science of St. Louis, has recently described some experiments that he has made in photographic "reversal," one of his aims apparently being to find a useful method of manipulating photographic plates without the need for the exclusion of light from them. The advantage of such a method is obvious when the experiments incur the possibility of light being accidentally produced, as in electrical work. He exposes the plates to light for a few days before use—"to the light of an ordinary room." The other descriptions of exposures are also vague, the time being given, for example, of camera exposures, but with no record of the lens aperture or indication of the character of the light. It is, therefore, not possible to follow the experiments described in other than a qualitative way. Prof. Nipher has taken street views, Röntgen ray photographs, and "electrographs," on plates that have received preliminary exposures, and developed them by the light, for example, of a sixteen candle-power incandescent lamp, at a distance of from about 1 to 5 feet. The exposure on the object was, in one case, about forty times the exposure that would have been required for making an ordinary negative; the over-exposed and pre-exposed plate giving, of course, a positive image. A good deal of work has already been done in this direction, but the uncertainty of the reversal, and the great difficulty of getting rid of mixed results of reversal and non-reversal, have so far prevented any practical use being made of the possibilities of these methods.

SUCH experiments as Prof. Nipher describes are interesting qualitatively, but before any process of the kind can be safely recommended for general use in cases where it might be advantageous, it will be necessary to determine the range of conditions that can be relied on to give simple, that is, unmixed results, and this can never be done by working with such objects and processes as are described in this communication. We would suggest the use of a series of graduated exposures, with a measurement of the opacities produced, and then the ordinary negative image and the reversed image could both be traced. The character of the reversed image could be judged of, and the range of exposures through which its production could be relied upon could be determined. Until some definite information of this kind is available, experiments in reversal will remain more curious than useful. It appears from Prof. Nipher's communication that he is still pursuing the subject, and we hope that he will succeed in placing the method on a firm foundation.

IN a paper in the *Berichte* of the German Chemical Society, Herr G. Kramer and Herr A. Spilker make the suggestion that an important source of petroleum beds may be the oil which is always diffused through the protoplasm of diatoms.

THE Report of the Botanical Exchange Club of the British Isles for 1898 has just been issued under the editorship of Mr. James Groves. The occurrence of *Stachys alpina* in Gloucestershire is regarded as an undoubted addition to the native flora of Great Britain.

WE have received a prospectus of the "Scientific Roll and Magazine of Systematized Notes," to consist of three volumes of about 500 pages each, which will be supplied to subscribers for 10s. per volume, at the rate of one volume a year, commencing in September 1900. The first part will be devoted to the literature of the Schizomycetes. The compiler is Mr. A. Ramsay, of 4, Cowper Road, Acton.

THE Annual Report of the Royal Botanic Gardens, Trinidad, for the year 1899, by the superintendent, M. J. H. Hart, gives evidence of work done in the Gardens in connection with the acclimatisation of foreign economical plants, and the study of diseases of fruits and other crops, with the assistance of the Kew establishment. The *Bulletin of Miscellaneous Information*, from

the same Gardens for April, contains, in addition to some natural history notes, a continuation of the descriptive list of West India and Guiana ferns.

A SHORT obituary notice of the late Franz Ritter von Hauer appeared in NATURE for April 13, 1899. A full account of the life and labours of this distinguished geologist has now been published by Dr. E. Tietze (*Jahrb. k.k. geol. Reichs. Wien*, Bd. 49). It is accompanied by a portrait, and by a list of geological papers and books dating from 1846 to 1897.

MESSRS. WILLIAMS AND NORGATE have just published a sixth revised edition of "Prehistoric Times as illustrated by Ancient Remains and the Manners and Customs of Modern Savages," by Lord Avebury (Sir John Lubbock). The first edition was published more than thirty-five years ago.

PROF. PRANTL'S "Lehrbuch der Botanik," upon which Prof. Sydney Vines' "Students' Text-book of Botany" is based, has reached an eleventh edition. The new edition has been revised and enlarged by Dr. Ferdinand Pax, professor of botany, and director of the Botanical Gardens, at Breslau. Mr. W. Englemann, Leipzig, is the publisher.

PROF. VIVIAN B. LEWES has in the press an exhaustive work on acetylene gas—a handbook for the student and manufacturer. The book will contain over 250 illustrations, and comprises a history of acetylene, its preparation, properties and chemical reactions, together with a complete list of legal enactments in full concerning its manufacture, patents, and other important data. Messrs. Archibald Constable and Co. are the publishers.

Two publications of interest to botanists will be issued from the Clarendon Press before long—the first part of the authorised English edition by Prof. J. B. Balfour of Dr. K. Goebel's "Organography of Plants," and Dr. A. Coppen Jones's translation of Prof. Alfred Fischer's "Structure and Functions of Bacteria." The former brings within reach of English students the only book of recent years upon its special subject; the latter is the only work on bacteriology of similar scope and mode of treatment that has appeared in England since Dr. A. de Bary's "Lectures on Bacteria," a second edition of which appeared in 1887. This translation of Prof. Fischer's "Vorlesungen über Bakterien" should be welcome in pathological laboratories.

THE Orient Company announce that the cruise to Norway, Spitsbergen and Iceland will be repeated this summer. Their steamship *Cuzco*, 3912 tons register, is appointed to leave London on July 3, and to arrive back on August 4. After visiting some of the most interesting Norwegian fiords, the *Cuzco* will proceed to Spitsbergen, thus affording an opportunity of viewing the midnight sun, as for five days and nights after the ship leaves the North Cape the sun will be continuously above the horizon. Thereafter the *Cuzco* will proceed to Iceland, and her contemplated stay there of three days will enable passengers to see some of the most interesting sights in this remote island. The Faroe Islands will also be visited on the way back to London, *viâ* Leith.

THE purification of mercury is frequently necessary in physical and physico-chemical work, the process generally relied upon being distillation *in vacuo*. The apparatus in general use for this purpose, although convenient, has the disadvantage of being somewhat fragile, and requires large quantities of mercury. Some doubts, moreover, have been thrown on the efficacy of distillation as a purifying process, as Victor Meyer, in 1887, showed that traces of foreign metals passed over even after repeated redistillations. According to G. A. Hulett (*Zeitschrift für physikalische Chemie*, xxxiii. p. 611), these traces of foreign metals are carried over mechanically during the bumping of the boiling mercury; and if measures are

taken to prevent this bumping, perfectly pure mercury can be obtained in one distillation. Instead of the complicated apparatus of Weinhold, or its various modifications, a slight modification of the arrangement of two distilling flasks, with a capillary tube for admitting air, as commonly employed in organic work, was found to work perfectly.

PROF. RICHARDS, of Harvard, continuing his valuable re-determination of atomic weights, has lately published, in conjunction with Mr. G. P. Baxter, a preliminary paper on the atomic weight of iron. He points out that the value $Fe = 56$, which is now used, is practically based on work of fifty years since—being Wackenroder's corrected value of Berzelius' result, which was based upon the conversion of metallic iron into ferric oxide. In their preliminary determinations, Messrs. Richards and Baxter have reduced ferric oxide to the metal. The ferric oxide was prepared in the first case from ferric hydrate, which itself was prepared with elaborate precautions from very pure iron ribbon. The mean of two closely agreeing determinations gave $Fe = 55.900$. In the second case, ferric oxide was prepared with equal care from ferric nitrate. The mean value of five determinations gave $Fe = 55.883$. Further determinations are promised, but meanwhile the higher value of the older number ($Fe = 56$) is explained as probably due to one or more of the following causes:—The possible presence of magnetic oxide in the ferric oxide; the possibility of incomplete reduction during the analysis of the substance; the possible presence of alkaline, siliceous or other non-reducible material. At the present stage of the work 55.88 may be taken as the most probable value.

THE additions to the Zoological Society's Gardens during the past week include a Sykes's Monkey (*Cercopithecus albigularis*) from British Central Africa, presented by Mr. C. H. Ambruster; a Barbary Ape (*Macacus inuus*) from Algeria, presented by Mr. R. S. Allen; a Large Red Flying Squirrel (*Pteromys inornatus*) from Northern India, presented by Mr. A. Dudley Yorke; three Goshawks (*Astur palumbarius*), European, presented by Mr. John Simonds; a Little Egret (*Ardea garzetta*) from North-west Africa, presented by Mr. J. H. Yates; an Allen's Porphyrio (*Hydrornia alleni*), captured at sea, presented by Miss Wallace; a West African Python (*Python sebae*) from West Africa, presented by Francis E. Colenso; a Green Lizard (*Lacerta viridis*), European, presented by Miss Mabel A. Heaton; a Common Snake (*Tropidonotus natrix*), British; two Moccasin Snakes (*Tropidonotus fasciatus*) from North America, presented by Mr. W. H. St. Quintin; a Lion (*Felis leo*, ♂) from Katiwar; a Nylghaie (*Boselaphus tragocamelus*, ♂), two Four-horned Antelopes (*Tetracerus quadricornis*), three Indian Gazelles (*Gazella bennetti*) from India; four Bearded Lizards (*Amphiloturus barbatus*), two Stump-tailed Skinks (*Trachysaurus rugosus*) from Australia, five American Box Tortoises (*Cistudo carolina*), six Stink-pot Mud Terrapins (*Cinosternum odoratum*) from North America, deposited; a Rocky Mountain Goat (*Haploceros montana*, ♂) from British Columbia, two Cunning Bassaris (*Bassaris astuta*) from Mexico, five Gentoo Penguins (*Pygosceles taeniatus*) from the Falkland Islands, a Three-toed Sloth (*Bradypus tridactylus*) from British Guiana, purchased; two Japanese Deer (*Cervus sika*), a Burchell's Zebra (*Equus burchelli*, ♂), born in the Gardens.

OUR ASTRONOMICAL COLUMN.

ROTATION PERIOD OF VENUS.—In the *Astronomische Nachrichten* (Bd. 152, No. 3641), Prof. A. Belopolsky gives the detailed measurements of the photographs of the spectrum of Venus taken during the recent favourable disposition, from which he has been enabled to confirm the short rotation period of the planet.

The spectrograms have been made with the 30-inch refractor at the Observatory of Pulkowa, using two different spectrograms,